REMARKS

Applicants thank Examiner Nutter for conducting the kind and courteous discussion with Applicants' representative, Daniel R. Evans, on August 31, 2005.

The rejection of Claims 1-18 under the judicially created doctrine of obviousness-type double patenting over Claims 1-23 of U.S. Patent No. 6,461,719 (hereafter US '719) is respectfully traversed. Moreover, the rejection of Claims 1-18 under 35 U.S.C. § 103(a) over the disclosure of US '719 is respectfully traversed.

Neither the claims nor the specification of US '719 suggest the presently claimed tetrafluoroethylene/ethylene copolymer composition. In particular, there is no suggestion to have a composition in which the thermoplastic fluoropolymer (B) has a crystallization temperature higher than the crystallization temperature of the tetrafluoroethylene/ethylene copolymer (A), in the claimed mass ratio (see Claim 1).

The Examiner's attention is directed to the tabulated compositions of US '719, in which the following table shows the copolymer components for a given composition along with the melting points of the respective copolymer.

Examples	CP1[a]	CP2[b]	MP-CP1,[c] °C	MP-CP2,[d] °C
1-3	A	AFLAS[e]	260	nmp[f]
4-6	B	AFLAS	220	nmp
11-12	A	C	260	< 147
13	A	D	260	< 179
14	B	C	220	< 147
15-16	B	D	220	< 179
17-18	A	E	260	127
19	A	F	260	139
20	B	E	220	127
21-22	B	F	220	139
23-25	G	AFLAS	179	nmp
26-28	H	AFLAS	147	nmp
29-30	G	E	179	127
31	G	F	179	139
32-33	H	E	147	127
34	H	F	147	139

Legend: [a]CP1: Copolymer 1. [b]CP2: Copolymer 2. [c]MP-CP1: Melting point of Copolymer 1. [d]MP-CP2: Melting Point of Copolymer 2. [e]AFLAS: AFLAS 100N (TFE/P; 56/44 (molar ratio) col. 11, lines 60-63). [f]nmp: No melting point.

US '779 discloses compositions that combine two copolymers: copolymer 1 (copolymers A, B, G, and H) and copolymer 2 (AFLAS 100N and copolymers C, D, E, and F) in a given proportion.

Copolymer A has a melting point 260°C (see col. 11, lines 33-34).

Copolymer B: melting point 220°C (see col. 11, lines 53-54).

"AFLAS 100N" is a copolymer containing tetrafluoroethylene (TFE) and propylene (P) polymerized units with a molar ratio of TFE/P of 56/44 (molar ratio) (see col. 11, lines 60-63). AFLAS 100N is a rubber-like material and therefore has no melting point. The "melting point" is a property observed in a substance having crystallinity, such as resins, etc., but no melting point is observed in a rubber-like material having no crystallinity.

As seen from the Table presented above, Examples 1-6 of US '719 are unlike the presently claimed composition.

Copolymer C: US '719 does not disclose the melting point of this copolymer. Copolymer C contains polymerized units of TFE, P, and ethylene (E), in a molar ratio of TFE/P/E of 53.2/38.4/8.4 (see col. 13, lines 34-37).

Copolymer D: US '719 does not disclose the melting point of this copolymer. Copolymer D contains polymerized units of TFE, P, and E, in a molar ratio of TFE/P/E of 62.1/21.6/16.3 (see col. 13, lines 53-57).

Since US '719 does not disclose melting points of Copolymers C and D, it is difficult to say with certainty what these values are. However, Applicants note that it is possible to estimate that the the melting point of the copolymer C is lower than the melting of the Copolymer H (147°C, see US '719 at col. 18, line 24), since as compared with the copolymer H as mentioned below, the polymerization units derived from E are reduced and the polymerization units derived from propylene are increased in the Copolymer C. If the

polymerization units derived from ethylene are entirely replaced with the polymerization units derived from propylene, such a composition is substantially the composition of the above-mentioned AFLAS 100N and is in rubber-like state.

On the other hand, it is estimated that the melting point of the copolymer D is lower than the melting point of the copolymer G (179°C, see US '719 at col. 17, line 66), since as compared with the copolymer G mentioned below, the polymerization units derived from ethylene are reduced and the polymerization units derived from propylene are increased in the copolymer D.

Accordingly, it is believed that Examples 11-16 of US '719 do not suggest the composition as claimed in pending Claim 1.

Copolymer G has a melting point of 179°C (col. 17, line 66). Copolymer G contains TFE, P, and E in a molar ratio (TFE/P/E) of 59.6/11.3/29.1 (col. 17, line 65).

Copolymer H has a melting point of 147°C (col. 18, line 25). Copolymer H contains TFE, P, and E in a molar ratio (TFE/P/E) of 50.3/22.7/27.0 (col. 18, line 24).

Copolymer E has a melting point of 127°C (col. 15, line 49). Copolymer E contains TFE, P, and vinylidene fluoride (VdF) in a molar ratio of (TFE/P/VdF) of 47.5/11.2/41.3 (col. 15, lines 48-49).

Copolymer F has a melting point of 139°C (col. 16, line 5). Copolymer F contains TFE, P, VdF, and (perfluorobutyl)ethylene PFBE in a molar ratio of (TFE/P/VdF/PFBE) of 59.9/11.4/27.3/1.4.

It should be clear that Examples 17-22 of US '719 do not suggest the composition as claimed in Claim 1.

Thus, it should be clear that US '719 discloses combining two copolymers (Copolymer 1 and Copolymer 2) in a given proportion, as indicated in the Tables. While CP1 of US '719 is like component (A) of pending Claim 1, CP2 of US '719 is unlike component (B) of pending Claim 1. For example, component (B) of pending Claim 1 has a crystallization temperature that is greater than component (A). This aspect is the polar opposite from that which is suggested in US '719.

It is kindly requested that the Examiner withdraw these rejections.

In view of the comments contained herewith, it is believed that the present application is now in a condition for allowance. Should the Examiner deem that a personal or telephonic interview would be helpful in advancing this application toward allowance, he is encouraged to contact Applicants' undersigned representative at the below-listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

Daniel R. Evans, Ph.D.
Registration No. 55,868

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)